The use of evidence from research on contextualised admissions to widen access to Scottish universities

Vikki Boliver and Stephen Gorard

Introduction

Widening access to university has long been a policy objective of the Scottish Government but there is a new determination to make much more rapid progress than has been the case in recent decades (Hunter-Blackburn et al 2016). This determination was kick-started in 2014 when the First Minister, Nicola Sturgeon, set out the bold ambition that somebody born in one of the most deprived communities in Scotland should have no less a chance to go to university than someone born in one of Scotland's least deprived communities (Scottish Government 2014). A Commission on Widening Access was set up to identify the most promising means of achieving this goal and to help set appropriately stretching widening access targets (CoWA 2015). A key recommendation of the CoWA's final report was that Scottish universities should engage in a strong form of "contextualised admissions" (Schwartz 2004), involving significant reductions in academic entry requirements for socioeconomically disadvantaged learners. More specifically, CoWA recommended that:

> "By 2019 all universities should set access thresholds for all degree programmes against which learners from the most deprived backgrounds should be assessed. These access thresholds should be separate to standard entrance requirements and set as ambitiously as possible, at a level which accurately reflects the minimum academic standard and subject knowledge necessary to successfully complete a degree programme." (CoWA 2016a: 11)

The rationale behind the setting of access thresholds is two-fold. First there is recognition that academic entry requirements have risen over time as a response to rising levels of demand for university places, such that academic entry requirements now typically exceed the minimum needed to succeed at degree level (CoWA 2015 & 2016a; Boliver, Gorard and Siddiqui 2017a). Second there is acknowledgement that socioeconomic inequality impacts on educational achievement, such that school attainment of disadvantaged learners often does not do justice to their true academic potential.

The philosophy underpinning access thresholds contrasts sharply with the more traditional 'meritocratic' model of university admissions in which places go to the most highly qualified applicants irrespective of social background. In contrast, access thresholds reflect a recognition that formal equality of opportunity is not genuine equality of opportunity in a society that is unequal. They link into a notion of fairness that philosopher John Rawls (1999[1971]) advocated, one in which genuinely fair (as opposed to merely formal) equality of opportunity requires adjustments for the fact that in an unequal society people are not equally able to demonstrate their capacity. Access thresholds represent such an adjustment; applicants are selected on potential or 'calibrated' merit where the calibration is not just how well people have achieved compared to the national picture but how they have performed considering the opportunities and barriers they have faced. This is a different kind of justice: not procedural justice - considered fair because everyone is treated the same - but distributive justice, working back from a fair distribution of resources (a university education) and building in a process that is geared towards achieving a fairer distribution of that resource.

As the CoWA reports acknowledge, many Scottish universities were already operating some form of contextualised admissions. However, this was not universal practice, and reductions in academic entry requirements for disadvantaged learners were typically of the order of just one or two grades (Boliver et al. 2017a). As such, the CoWA recommendation represents a call for "more radical action" than ever before (CoWA 2016a: 37). The Scottish Government has adopted the CoWA recommendation in full, mandating all Scottish universities to set access thresholds for applicants seeking entry in 2020/21 and beyond. It is clear that the Scottish Government regards access thresholds as a critical means of achieving its stretching new access targets. In the short term the goal is to increase in the representation

of those from Scotland's 20% most deprived neighbourhoods as measured by the Scottish Index of Multiple Deprivation (SIMD) to at least 16% of entrants to full-time bachelor degree programmes and at least 10% of entrants to every university in Scotland by 2021. In the longer term the ambition is for 20% of new entrants to Scottish universities to be drawn from the 20% of young people living in Scotland's most deprived communities.

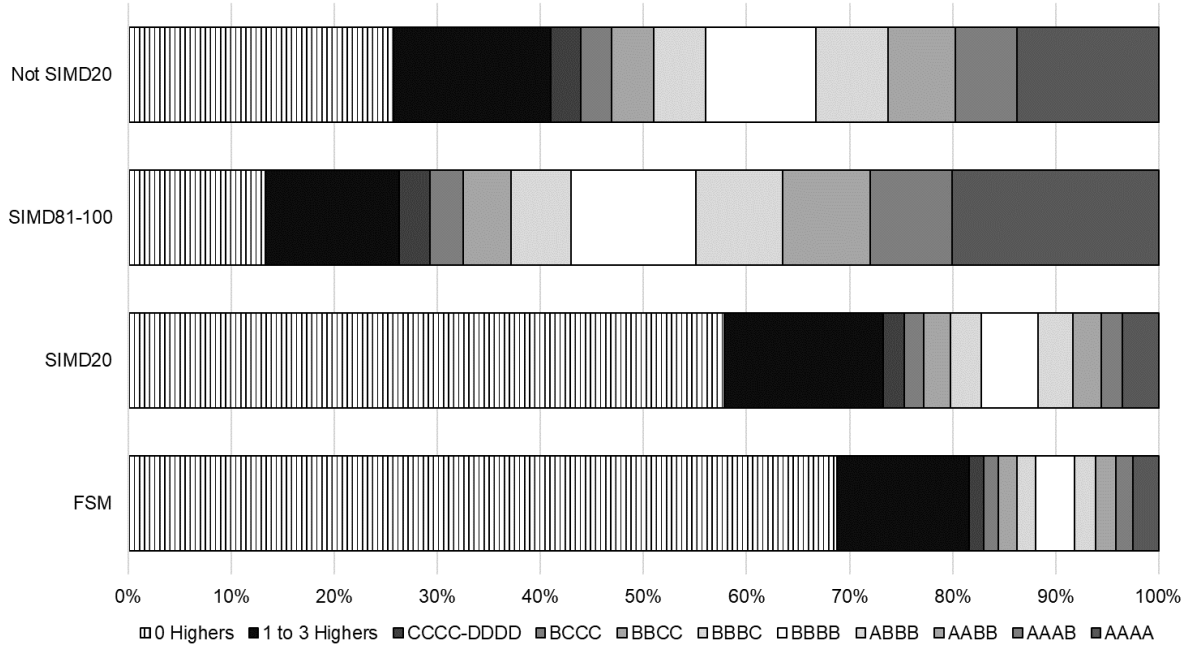
While the CoWA recommendation rests on the beginnings of an evidence base, CoWA has urged universities to continually refine their access thresholds for contextually disadvantaged learners in line with emerging evidence (CoWA 2016a: 38). CoWA also urged the Scottish Government and Scottish Funding Council to work with various stakeholders to develop more robust indicators of contextual disadvantage in light of the inevitable inaccuracies that occur when trying to identify socioeconomically disadvantaged individuals using the area-level measure SIMD (CoWA 2016a: 66; Gorard et al. 2017). In this chapter we report on research commissioned by the Scottish Funding Council (SFC) which set out to contribute to the evidence base in both of these regards (Boliver et al 2017b). We outline the evidence generated by this research before discussing its uptake and impact in the Scottish context. For a summary of parallel programme of work focused on England and funded by the ESRC, see Boliver, Gorard and Siddiqui (2019 and forthcoming). The evidence for England is much the same as that for Scotland, and has influenced policy and practice in England (see for example OfS 2019) as we discuss below.

Building the evidence base for contextualised admissions

The SFC funded project "Mapping and Evaluating the Use of Contextual Data in Undergraduate Admissions in Scotland" set out to create an evidence base underpinning the use of a contextualised approach to admission as a means of widening access to higher education. The project involved interviews with admissions personnel working at Scottish universities, coupled with an analysis of statistical data relating to the educational achievements and trajectories young people in Scotland (Boliver et al 2017b). The key findings of the interview research are reported elsewhere (Boliver, Powell and Moreira 2018). In this chapter we focus on the evidence generated by the statistical component of the project.

Our first research question was: how far would academic entry requirements need to be reduced in order to achieve a fully proportional representation of socioeconomically disadvantaged learners among entrants to Scottish universities? To answer this question we drew on Scottish Government data on the attainment of Scottish state schools pupils by the end of 6th year (S6), the final year of upper secondary education. As reported in Figure 1, attainment levels are strikingly unequal for pupils from more and less advantaged backgrounds. More than half of all pupils from the most deprived neighbourhoods (SIMD20) did not have any Highers by the time they were due to finish S6 (57%). Highers are the traditional qualifications usually required for university admission in Scotland. The figure is even worse for recipients of free school meals (FSM): over two-thirds had no qualifications at Higher level (69%). What is also striking is that very few SIMD20 residents gain the very highest grades, AAAA at Higher level, and the same is true for FSM recipients (4% and 3% respectively). In contrast, a fifth of those from Scotland's least deprived neighbourhoods achieved AAAA at Higher level (20%).

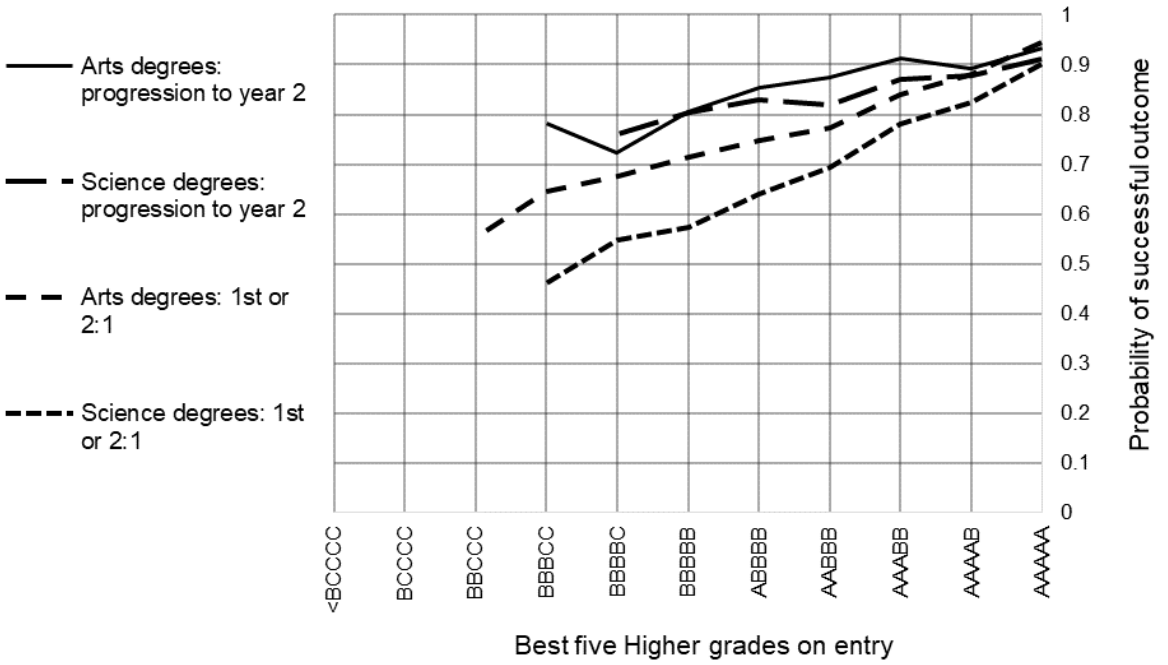
Figure 1. Higher level achievement by the end of 6th year (S6) for all state school pupils in 4th year (S4) in 2007/8 or 2008/9



What these figures mean is that it is not possible to achieve equal representation of SIMD20 and non-SIMD20 students at university without the use of access thresholds. But how low could access thresholds go without risking many more students then failing or dropping out? To answer this question we drew on data supplied by the Higher Education Statistics Agency (HESA) for the cohort of young people in Scotland who finished secondary school in 2008 and 2009 and went to university at the beginning of this decade. Figure 2 illustrates the statistical relationship between these students' Higher qualifications on entry to a highly academically selective Scottish university and their probability of success as indicated by two different measures. The first captures their chances of progressing successfully to year 2 of their degree programme, rather than failing or dropping out. The second refers to their probability of obtaining a first or upper second class degree, rather than a lower degree classification.

What the evidence shows is that, although students were more likely to get through their first year successfully if they entered with higher grades, the slope is very shallow. There is no sharp drop off in success for students who entered with less than five Highers at A grade, and even students who have entered high tariff universities with B grades, by and large, progressed successfully into year two.

Figure 2. Statistical relationship between prior attainment and degree success among young entrants to higher tariff universities in Scotland



The picture differs somewhat in respect of the degree classification students achieved, where there is a steeper relationship between grades on entry and gaining a first or a 2.1, rather than a lower degree classification. Nevertheless, students who have come into those universities with B grades rather than A grades had a better than evens chance of achieving a first or a 2.1. It is not a foregone conclusion, therefore, that students who enter a high tariff university with B grades at Higher will not get a good degree: in fact, there is 50/50 chance that they will.

The same analysis was carried out for medium tariff and lower tariff universities with very similar results. For medium tariff universities there was little relationship between grades at Higher level on entry and getting through into year two. Again, there was a steeper slope when it comes to success measured by getting a good degree, a first or a 2.1. But it is still the case that those entering with C grades have a better than evens chance of achieving a first or a 2.1 and a four in five chance that they will come out with a degree. Similarly, for lower tariff universities there is a very flat, shallow relationship between Higher grades on entry and progressing to year 2. In these universities, there is a less steep relationship between Higher grades on entry and the outcome of getting a good degree.

While the analysis shows that it is possible for students to come in with lower than traditionally required grades and to succeed in their degree study, even at high tariff universities, it also highlights the need to think much more carefully about how students are supported to learn once they get to university (Howieson and Minty 2019). Some of those admitted with lower than typical grades will have gaps in their subject knowledge, or need help to develop their academic skills. They are, by definition, individuals whose circumstances have prevented them from having as advanced and as deeply developed an education as more traditional students.

So, what are the best indicators of socioeconomic disadvantage to use to ensure that contextual offers and other widening access interventions reach their intended beneficiaries? The Scottish Government's access targets are all set in terms of SIMD, despite the fact that, as an area-level measure, it is acknowledged to be a poor proxy for the circumstances of individuals (Scottish Government 2016; CoWA 2016b; Gorard et al. 2017). Put simply, most disadvantaged people do not live in the most

disadvantaged areas, and not all people who live in disadvantaged areas are disadvantaged. We demonstrate this by drawing again on data for the population of 4th year (S4) pupils in Scottish state schools in 2007 and 2008 and cross-tabulating SIMD20 status with free school meal (FSM) status. Individuals in receipt of free school meals are, by definition, disadvantaged since they must meet eligibility requirements in terms of family income and receipt of certain welfare benefits. This is verified information about individuals that is available from official records, and so is a valid and reliable indicator of disadvantage. If SIMD20 is a good proxy for the socioeconomically disadvantaged status of individuals, it should capture most or all young people in receipt of free school meals. However, our analysis revealed that only about half of all free school meal recipients lived in SIMD20 areas (48%). Thus, using SIMD20 to decide who is entitled to the access threshold means that we are excluding half of those in a group we definitely know should be included.

The other problem with using SIMD is that some people who live in deprived neighbourhoods are not themselves deprived and are not the intended beneficiaries of these access thresholds. Including them in statistical returns would give a misleading picture of progress. Among the population of S4 pupils attending Scottish state schools in 2007 and 2008, 75% of those who were SIMD20 residents were not receiving free school meals and we simply do not know what proportion of this 75% are in fact deprived. If SIMD20 is used to decide who is entitled to an access threshold, we could be in a position where we are giving adjusted entry requirements to many people who are not disadvantaged at all, but just happen to live in SIMD20 postcodes. This would of course be the opposite of what we intended to do. If the goal is genuine equality of access to university, we must use verified individual-level measures, such as free school meal status or low household income, to determine whether someone is socioeconomically disadvantaged or not.

Evidence into use

We have produced reports of this body of evidence in various formats for policy-makers and practitioners, engaged with the media, and made numerous public presentations. This was all done in order to try and get our messages across in order to improve the outcomes for the sector, universities, and their potential students from disadvantaged backgrounds.

We raised the public profile of evidence in favour of a contextualised approach to university admissions by engagement with the national press in both Scotland (The Herald, 31 October 2017) and the wider UK (BBC News 2017; Times Higher Education 2017 & 2018), and by giving a public lecture entitled *Promoting fairer access to Scottish universities: how can this be achieved?* at Edinburgh University in March 2019 (Boliver 2019a) and a further public lecture focused on our findings for England entitled *Promoting fairer access to higher education: the necessity of contextualised admissions* delivered at Oxford University in February 2019 (Boliver 2019b). We have also put on a number of public events, such as *Let's Make Education Fairer,* organised as part of the ESRC Festival of Social Science (Gorard 2018)

We engaged with university admissions professionals directly, by giving an invited workshop on contextualised admissions to higher education practitioners attending the Scottish Funding Council's *Scotland's Fair Access Conference* in June 2017 (Boliver 2017). We published in April 2019 a research briefing aimed at Heads of Admission, entitled *Using contextualised admissions to widen participation in higher education: a guide to the evidence base* (Boliver, Gorard and Siddiqui 2019). This was sent by email to all heads of admission in English universities and referenced in an article written for WonkHE in late April 2019 (Gorard, Boliver and Siddiqui 2019).

We raised policy-makers' awareness via engagement and collaboration with third sector organisations, including the Higher Education Policy Institute (HEPI), Brightside, Reform, the Bridge Group and the Sutton Trust. This engagement resulted in numerous invited panel discussion or debate contributions at policy-maker oriented events since 2016 (for example, Boliver 2019c). We were invited to contribute a think piece on contextualised admissions to an edited collection entitled *Where next for widening participation and fair access: new insights from leading thinkers*, published by HEPI/Brightside

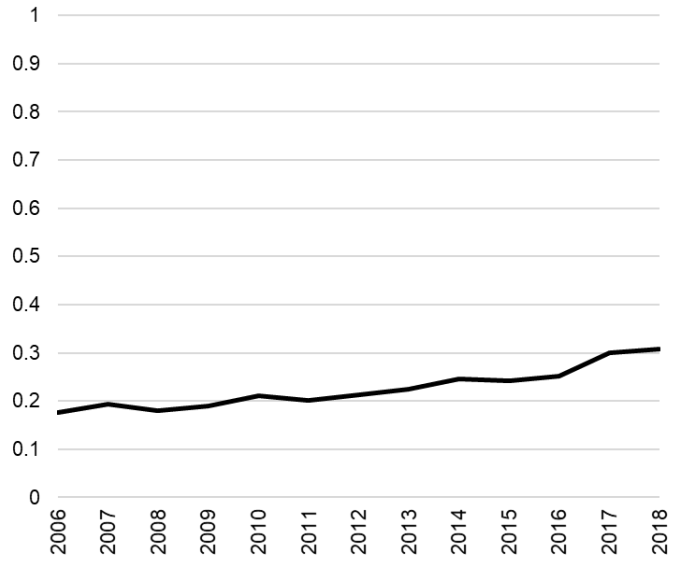
(Boliver, Gorard and Siddiqui 2017b); and to conduct additional research on the use of contextual data by Sutton Trust top-30 universities, published by the Sutton Trust in 2017 (Boliver et al 2017).

Professor Boliver has helped to implement national policy in relation to contextualised admissions specifically and widening access more generally in Scotland. She was the invited academic expert member of the Scottish Framework for Fair Access Development Group, charged with developing an evidence-based toolkit and community of practice to foster fairer access to higher education in Scotland (2017-2018). She is currently an invited academic expert member of the Scottish Government's Access Delivery Group, charged with implementing the recommendations of the Commission on Widening Access (2018 onwards). Our research has been referred to by national policy-makers in Scotland and signalled as of being of value to the sector. The Scottish Government Commission on Widening Access referred to our research in its 2015 interim report and 2016 final report (CoWA 2015 & 2016a), and our recommendations were endorsed by the Scottish Government Commissioner for Fair Access in his first annual report of the (2017).

Our parallel programme of research on England has also been taken up by policy makers and practitioners. The Office for Students invited Professor Boliver to participate in a closed roundtable discussion of higher education access and participation in September 2018, where the evidence-base and ethical case for the use of contextual data was discussed. Our research is cited on Office for Students website under A-Z of effective practice in access and participation. Professor Boliver was invited to speak on contextualised admissions at the Office for Students *Insight Event on Fairer Access and Participation* on 1st May 2019 (Boliver 2019d); and our research was cited in an Office for Students *Contextual Offers Insights Brief* published on the same day (OfS 2019).

In Scotland, the key beneficiaries have been prospective university students from socioeconomically disadvantaged backgrounds whose school attainment would have previously rendered them ineligible to enrol in a Scottish university generally or in a higher-tariff Scottish university in particular. There is already some evidence that entry rates have begun to equalise, as shown in Figure 3 (and in UCAS 2018). Scottish universities have recently begun to improve the representation of young people from the most deprived neighbourhoods as measured by SIMD20. Figures for the sector as a whole rose to 15.6% in 2017/18 after having hovered at less than 14% for the previous few years (SFC 2019). As such, the sector as a whole is likely achieve its 2021 target of 16% from SIMD20 areas slightly ahead of schedule. The most striking increases in the proportions of new entrants drawn from the most deprived neighbourhoods were for two of Scotland's most academically selective and prestigious universities: at St Andrews the figures increased form 5.5% to 7.5% in a single year, while Edinburgh University saw a rise from 6.4% to 8.1% (SFC 2019).

Figure 3. Rates of entry to Scottish universities: ratio for those from the most as compared to least deprived neighbourhoods



Source: UCAS End of Cycle Report, 2018

In 2019, all Scottish universities set access thresholds for 2021/22 entry, including universities which had not previously routinely reduced entry requirements for disadvantaged applicants. Our research added significantly to the evidence base that gave the latter universities the confidence to reduce academic entry requirements. For example, for admission to its English programme, The University of St Andrews previously required AAAB at Higher level for all applicants, (with the exception of a small number of contextually disadvantaged applicants admitted with BBBB via its supported first year *Gateway* programmes). For 2021/22 entry, all St Andrew's applicants identified as contextually disadvantaged will be required to achieve one grade lower than the previous standard entry requirement (AABB rather than AAAB), while all applicants *not* deemed contextually disadvantaged will be required to achieve one more Higher qualification at grade A than was the case previously (AAAAB rather than AAAB). Extrapolating from our evidence presented in Figure 1 above, this is likely to result in the percentage of SIMD20 young people eligible for entry to St Andrews rising from 6% to 9%, and in the percentage of eligible non-SIMD20 young people declining from 20% to <14%.

Unfortunately, at the time of writing the Scottish Government is still measuring progress on widening access principally in terms of SIMD20. However, the 2019 annual report of the Commissioner for Fair Access says that "the Access Data Working Group has recommended that FSM registration should be used as an individual-level indicator" (Commissioner for Fair Access 2019: 24). This is directly in line with the recommendations from our research, endorsed by policy makers (Scottish Government 2019: 4).

Moves for formal contextualised admissions in England are slower than in Scotland, but they are happening and the same issues are arising. Again it is proving hard to move policy-makers away from less valid area measures of disadvantage to verified individual ones. The new *Access and Participation Plans* universities submitted to the Office or Students in 2019 indicate that many, but by no means all, highly selective universities in England have become more willing to develop contextualised admissions policies. Several English universities have in fact cited our work in support of their contextualised admissions strategies in their *Access and Participation Plans*. That things are moving in the right direction is perhaps not surprising given that, as we have emphasised in our policy briefs (Boliver, Gorard and Siddiqui 2019 and forthcoming), the challenging new widening access targets set by the Office for Fair Access can probably only be achieved by means of substantial reductions in academic entry requirements for disadvantaged learners.

Conclusion

As with other claims in this book, although our engagement activities have clearly been mentioned, by policy makers, and our research has visibility, it is hard to say how effective this approach has been for getting evidence into use. Our work has been referenced in both England and Scotland on the issue of reducing entry tariffs, but the central point that measures of disadvantage must be individual and verified has been slower to have any impact. What the engagement and publishing has done is lead to a situation where a researcher was asked to join key policy meetings and committees. Again, as with other chapters, this direct link is probably the most effective way of getting results into use.

References

BBC News (2017) *Universities should be upfront about admissions*, 26th October 2017. Available online at: https://www.bbc.co.uk/news/uk-scotland-41761729

Boliver (2017) Invited workshop on contextualised admissions at the Scottish Funding Council's *Scotland's Fair Access Conference*, Perth, 20th June 2017. Available online at: http://www.sfc.ac.uk/web/FILES/Access/Scotland_Fair_Access_Conference_2017_programme.pdf

Boliver, V. (2019a) *Promoting fairer access to Scottish universities: how can this be achieved?* Public lecture given at Edinburgh University, 25th March 2019. Available online at: https://www.ces.ed.ac.uk/promoting-fairer-access-to-scottish-universities-how-can-this-be-achieved/

Boliver, V. (2019b) *Promoting fairer access to higher education: the necessity of contextualised admissions*. Invited talk given at Lady Margaret Hall, Oxford University in February 2019. Available online at http://www.ox.ac.uk/event/promoting-fairer-access-higher-education-necessity-contextualised-admissions

Boliver, V. (2019c) *Want fairer access to higher education? Contextualise admissions.* Invited talk given at the annual conference of The Bridge Group, London, May 2019. Available online at: https://vimeo.com/348359116

Boliver, V. (2019d) *Are current approaches to contextualised admissions enough?* Invited talk given at the Office for Students Insight Event on Fairer Access and Participation, London, 1st May 2019. Available online at: https://www.officeforstudents.org.uk/news-blog-and-events/events/insight-event-fairer-access-and-participation/

Boliver, V. Crawford, C., Powell, M. and Craige, M. (2017a) Admissions in Context. London: Sutton Trust.

Boliver, V., Gorard, S. and Siddiqui, N. (2017a) How can we widen participation in higher education? The promise of contextualised admissions. In The University as a Critical Institution? Edited by Rosemary Deem and Heather Eggins. Rotterdam: Sense Publishers, pp. 95–110.

Boliver, V., Gorard, S. & Siddiqui, N. (2017b) A more radical approach to contextualised admissions. In Where Next for Widening Participation and Fair Access? New Insights from Leading Thinkers. Oxford: Higher Education Policy Institute and Brightside.

Boliver, V., Gorard, S. and Siddiqui, N. (2019) Using contextualised admissions to widen participation in higher education: a guide to the evidence base. Durham Evidence Centre for Education Research Briefing No. 1. https://www.dur.ac.uk/resources/dece/ContextualisedHEadmissions.pdf

Boliver, V., Gorard, S. and Siddiqui, N. (forthcoming) Using contextual data to widen access to higher education, *Perspectives: Policy and Practice in Higher Education*.

Boliver, V., Crawford, C., Powell, M. & Craige, W. (2017) Admissions in Context: The use of contextual information by leading universities. London: Sutton Trust.

Boliver, V., Gorard, S., Powell, M., and Moreira, T. (2017b) Mapping and Evaluating the Use of Contextual Data in Undergraduate Admissions in Scotland. Edinburgh: Scottish Funding Council. Available at: http://www.sfc.ac.uk/access-inclusion/contextualised-admissions/evaluating-contextual-admissions.aspx

Boliver, V., Powell, M. & Moreira, T. (2018). Organisational Identity as a Barrier to Widening Access in Scottish Universities. Social Sciences 7(9): 151. Available at: https://www.mdpi.com/2076-0760/7/9/151

Commissioner for Fair Access (2017) Laying the foundations for fair access: annual report 2017 form the Commissioner for Fair Access. Edinburgh: Scottish Government.

CoWA (2015) Interim Report. Edinburgh: Scottish Government Commission on Widening Access.

CoWA (2016a) A Blueprint for Fairness. The Final Report of the Commission on Widening Access; Edinburgh: Scottish Government Commission on Widening Access.

CoWA (2016b) Commission on Widening Access - Technical paper on measures and targets - March 2016. Edinburgh: Scottish Government.

Gorard, S., Boliver, V., Siddiqui, N. and Banerjee, P. (2017) Which are the most suitable contextual indicators for use in widening participation to HE? *Research Papers in Education.*

Gorard, S. (2018) *Let's Make Education Fairer,* Pubic event organised as part of the ESRC Festival of Social Science in November 2018. Available online at: https://www.youtube.com/watch?v=5dkV8uNenbU&feature=youtu.be

Howieson, C. and Minty, S. (2019) Supporting widening participation students at university. CES Briefing No. 67. Available at: http://www.ces.ed.ac.uk/PDF%20Files/Brief067.pdf

Hunter-Blackburn, L., Kadar-Satat, G., Riddell, S. and Weedon, E. (2016) Access in Scotland: Access to Higher Education for People from Less Advantaged Backgrounds in Scotland. London: Sutton Trust.

OfS (2019) Contextual Admissions: Promoting Fairness and Rethinking Merit. Bristol: Office for Students. Available at: https://www.officeforstudents.org.uk/media/bf84aeda-21c6-4b55-b9f8-3386b21b7b3b/insight-3-contextual-admissions.pdf

Rawls, J. (1999[1971]) A Theory of Justice. Oxford: Oxford University Press.

Schwartz, S. (2004) Fair Admissions to Higher Education: Recommendations for Good Practice; Nottingham: Department for Education and Skills.

Scottish Government (2014) One Scotland: The Government's Programme for Scotland 2014–15, Edinburgh: Scottish Government.

Scottish Government (2016) Introducing the Scottish Government Index of Multiple Deprivation 2016. Edinburgh: Scottish Government.

Scottish Government (2019) Identifying Access Students: A report on the work of the Access Data Working Group in response to Recommendation 31 of the Commission on Widening Access. Edinburgh: Scottish Government.

SFC (2019) Report on Widening Access 2017-18. Background tables to statistical publication SFC/ST/07/2019. Edinburgh: Scottish Funding Council. Available online at: http://www.sfc.ac.uk/publications-statistics/statistical-publications/2019/SFCST072019.aspx

The Herald (2017) Scotland's top universities urged to slash entry grades for poor students, 31st October 2017. Available online at: https://www.heraldscotland.com/news/15629021.scotlands-top-universities-urged-to-slash-entry-grades-for-poor-students/

Times Higher Education (2017) *Admit poorer students with three Cs elite universities told*, 14 October 2017. Available online at: https://www.timeshighereducation.com/news/admit-poorer-students-three-cs-elite-universities-told

Times Higher Education (2018) *Admissions staff told to focus on duration of deprivation*, 1 November 2018. Available online at: https://www.timeshighereducation.com/news/admissions-staff-told-focus-duration-deprivation

UCAS (2018) End of Cycle Report 2018: Patterns by applicant characteristics. Figure entitled 'Scottish domiciled 18 year old entry rate by SIMD 2016 quintile' https://www.ucas.com/file/197261/download?token=yGrM_eUZ

Acknowledgements
The research reported on in this chapter was funded by the Scottish Funding Council as part of their Impact for Access initiative. The full project report is available at http://www.sfc.ac.uk/access-inclusion/contextualised-admissions/evaluating-contextual-admissions.aspx. The text of this chapter is drawn in part from a public lecture given in honour of the late Professor David Raffe, available at http://www.ces.ed.ac.uk/promoting-fairer-access-to-scottish-universities-how-can-this-be-achieved/ and an accompanying research briefing entitled "Promoting fairer access to Scottish universities – how can this be achieved?" published by the Centre for Educational Sociology at Edinburgh University and available at http://www.ces.ed.ac.uk/PDF%20Files/Brief068.pdf. We are grateful to Dr Cathy Howieson for her editorial work on the research briefing and for permitting us to re-use parts of the text in this book chapter.